

Women with Multiple Primary Breast Cancers Diagnosed Within a Five Year Period, 1994-1998

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Introduction: Women diagnosed with a primary breast cancer are at higher risk for a second primary. Few studies have focused on a comparison of women with single breast primary cancers and women with multiple primary breast cancers. The 1994-1998 NAACCR dataset aggregated from high quality registries representing more than one-third of the U.S. population provides a unique opportunity to examine the incidence of multiple primary breast cancers in a large population.

Materials and methods: Using the multi-registry dataset, we described the incidence pattern of malignant synchronous (within 2 month) and short-term metachronous (from 3 to 60 months) multiple primaries and single primary breast cancers by demographic and tumor characteristics.

Results: Synchronous multiple primary tumors were more similar in age, stage, and tumor grade to single breast tumors than they were to short-term metachronous tumors. The short-term metachronous tumors did not resemble either the synchronous tumors or the single primaries.

Discussion: These findings may indicate that while synchronous multiple primaries may have treatment implications different from single primaries, their etiology may be similar to single breast primaries. Further, they may actually be multi-centric single primaries. The two-month interval between multiple primaries is arbitrary and may not distinguish between the synchronous tumors and those occurring within 12 months of the index tumor. The rules for defining and counting breast primaries have implications for interpretation of incidence rates and temporal trends. These data also suggest the need for standard definitions for multiple primary breast tumors among clinicians, pathologists and surveillance epidemiologists.

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